

CATÓLICA LISBON SCHOOL OF BUSINESS AND ECONOMICS

## **Crowdfunding and Religiosity**

An understanding of the dynamics of religiosity on  
social lending in Kiva

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Dissertation submitted in partial fulfilment of requirements for the degree of MSc in  
Business Administration, at Católica-Lisbon University, June 2013.

# Abstract

This dissertation aims to study the discrepancy between academic research and laboratory studies regarding the relationship between the religiosity level of an individual and its engagement with pro-social activities. This study examined the hypothesis that religiosity, spirituality and/or altruistic values would display a pro-social behaviour on on-line micro-lending. A survey of 3928 individuals from the Crowdfunding platform Kiva.org contributed to the understanding of the relationship between religiosity and pro-social behaviour on on-line platforms. Findings in this setting indicate that non-religious individuals display a higher engagement level with online pro-social activities on Kiva than do religious or spiritual individuals. Discussion focused on the discrepancy between in-group and out-group affiliation within religious individuals (different values), as well as feminine and non-feminine targets. This has clear implications for micro-lending platform owners, consumer behaviour, marketing segmentation and targeting of online users.

**Keywords: Religion; Religiosity; Spirituality; Pro-social; Micro-lending; Crowdfunding; Kiva**

## Preface

Having been a student of Professor Andrei Villarroel, Crowdfunding was first presented to me in one of his classes. As I found the topic extremely interesting for further research due to its novelty, I decided to focus my master dissertation on this big ball of Crowdfunding.

While attending Professor Villarroel's Crowdsourcing Business Models Seminar, after considering several alternatives, I came across the Kiva.org platform. I focused my attention on the particularity of Kiva Teams. Early qualitative analysis of Kiva Teams suggested that religiosity was an interesting dynamic factor.

After searching the literature available under the keywords of Crowdfunding and Religiosity, I discovered that nothing has been written about it, even in the domain of pro-social lending platforms. As a result, Prof. Villarroel prompted me to focus my study on Religiosity as an influential pattern of behaviour at the platform Kiva.org, and from that moment on I decided to focus my research on that specific topic.

I have to say that it was an exceptional choice. No other work has given me so much pleasure doing than this dissertation. I am glad to contribute to the healthy debate on this subject in our current society as it combines online distributed forms of organization (Villarroel et al, 2011) as portrayed by Crowdfunding, and the interesting domain of Religious psychology.

## Acknowledgements

I would like to express my gratitude to a few people that helped, advised and motivated me through the challenging process of writing and organizing this dissertation.

First, I would like to thank my advisor, Professor Andrei Villarroel for inspiring me to write about such an interesting and peculiar topic, and for all the mentorship provided. Secondly I would like to thank my CBM Seminar colleagues Filipe Estrela and Sebastiano Fortis for the group work and companionship while developing the survey and during the whole seminar.

I would like to extend my gratitude to my dear parents and to Ulrik for all the motivation and support during all the times.

Last but not least, I would like to thank all Kiva Members who participated in our survey, who were astonishingly helpful in spreading the questionnaire and who contributed with important insights for the consolidation of this dissertation and its findings.

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# Introduction

This study explores the link between two different worlds: Crowdfunding and the Psychology of Religion. Crowdfunding is a rather new concept that finds its roots on the broader concept of Crowdsourcing (Howe, 2006; Villarroel 2008), with the particularity that the “crowd” contributes voluntarily to the production process by providing a small amount of financial support for its execution, with or without expectation of receiving compensation. Crowdfunding is a new form of financing that allows entrepreneurs to appeal directly to the general public to finance their projects.

Substantial research has covered the relationship between religiosity and pro-social behaviour. Some psychological theories assume that religion contributes positively to pro-social behaviour (Hardy and Carlo, 2005; Reitsma et al., 2006, Batson et al. 1993). In order to assess such theories in light of the emergence of Crowdfunding, this research focuses on the micro-lending platform Kiva.org. Kiva was founded in 2005 by Matt and Jessica Flannery in California and is “one of the pioneers in the provision of microfinance” (Gajjala et al., 2011: 884).

Kiva has built a unique community and managed to grab their everyday focus by facilitating peer interaction with “Kiva Teams”. Interestingly enough, the top Kiva Teams have a religious nature and are competing in terms of “number of members” and in terms of “amount of loans”. For example, the two most numerous Kiva Teams are “*Kiva Atheists, Agnostics and Free-Thinkers*” with 25,945 members who have lent \$11.25M in 384,888 loans, followed by “Kiva Christians” with 11,563 members who have lent \$7.33M in 210,423 loans.<sup>1</sup>

This thesis is divided into six main sections. Firstly, an overview of the current literature surrounding Crowdfunding and Religiosity is presented, followed by the proposed Research Hypotheses. Then, the Methodology for this research is presented, followed by the Results from the statistical data analysis, and the subsequent implications in Discussion and Conclusions. Finally, the last section includes Practical Implications of this study, as well as their Limitations and opportunities for Future Research.

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<sup>1</sup> Source: <http://www.kiva.org/teams> Last accessed: 19<sup>th</sup> June 2013

# Literature Review

## Crowdsourcing

“Crowdsourcing” as a descriptive concept of open innovation phenomenon was used for the first time in an article of the Wired Magazine by Jeff Howe. In his own words *“Crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of open call.”* (Howe 2006)

Web 2.0 is a necessary condition for the development of Crowdsourcing as it allows individuals and organizations from all around the World to interact and share opinions in real time (Albors et al., 2008; Kleemann et al., 2008). Hence, Web 2.0 is a tool to gather collective intelligence in pro of online collaboration, which is the foundation of Crowdsourcing (O’Reilly 2007).

However Howe (2008) states that Web 2.0 alone does not justify why crowdsourcing is becoming a trend by itself. Rather it has made it smoother and more effective.

Academic theorists have been integrating the emergent concept of Crowdsourcing into the organization of work and innovation (Villarroel, 2008; Brabham, 2008; Van den Ende, Villarroel and Tucci, 2009; Malone, Laubacher and Dellarocas, 2010). Similarly, theorists have been providing an introduction to Crowdfunding as an evolution of the concept of Crowdsourcing involving monetary resources (Villarroel and Gorbatai 2011b).

## Crowdfunding

A first understanding of Crowdfunding was provided by Lambert & Schwienbacher, (2010). In their own words *“Crowdfunding involves an open call, essentially through the internet, for the provision of financial resources either in the form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes.”* (Lambert & Schwienbacher 2010:6).

The presented definition was built upon the characterization of Crowdsourcing (Kleeman et al., 2008). Crowdfunding is a rather new concept that finds its roots on the broader concept of Crowdsourcing, with the particularity that the “crowd” contributes voluntarily to the production process by providing a small amount of financial support for its execution (Kleeman et al., 2008), with or without expectation of receiving compensation (Lambert & Schwienbacher 2010) such as charity platforms like Global Giving.

Collecting small amounts of money from a large pool of people has an interesting social cooperation history (Ordanini et al., 2011). Recent examples include the fundraising strategy carried out by Responsys in September 2012 with the goal of helping over 26,000 people in Rwanda get clean water. It revealed to be the most successful water's charity campaign ever, raising \$2M, \$300K more than the original goal (Charlton, 2013). A similar fundraising video campaign was created by Wunderman London in February 2013 in UK. In order to overcome crowd's negligence to morbid footage showing children diseases, a clever video showing celebrities' genuine reaction to the effect of treatable tropical diseases on disadvantaged children was created. Within a week the video generated £60K of donations in a week, with the aim of treating 120,000 children from seven treatable diseases for a year (Charlton, 2013).

A better understanding of the phenomenon is provided by the recent definition of Belleflame et al., (2011) *"Crowdfunding involves an open call, mostly through the internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights"* (Belleflame et al., 2011:3). It is a new form of financing that allows entrepreneurs to appeal directly to the general public.

Crowdfunding is spreading through different industries, adapting itself to different circumstances and purposes, such as equity, loans, investments in return for all kinds of rewards and donation funding. According to the 2013 Crowdfunding Industry Report by Massolution 2013, Crowdfunding platforms raised \$2.7 billion in 2012 and an 81% increase in volume is forecasted to 2013, \$5.1 billion<sup>2</sup>. The loan based funding accounts for \$1.2 billion of the 2012 cash flow in Crowdfunding which represents the biggest growth rate, of 111%, and has become a popular funding method for micro credit institutions and community-driven loans to local SMEs (Massolution Crowdfunding Industry Report 2013).

This form of community-driven loans has gradually compelled the crowd into a fresher form of private loan called "peer-to-peer lending" (Mishra and Koren, 2011). Internet "Peer-to-peer lending" (P2P) is a novel popular form of crowd-sourced microfinance where individual lenders make unsecured loans to unrelated individual borrowers over the internet (Bruce 2007; Steiner 2007; Stegman and Faris 2003). P2P lending can be viewed as a digitized version of traditional microfinance (Morduch, 1999) and differs in the way that mediation of financial institutions is not required (Herzenstein et al., 2008; Galloway, 2009). P2P lending attracted attention for the first time in 2006 by the online lending platform "Zopa" (Hulme & Wright, 2006), but it was thanks to "Prosper.com" that it became famous (see more info about Prosper below).

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<sup>2</sup>Source: <http://research.crowdsourcing.org/2013cf-crowdfunding-industry-report>. Last accessed on 19<sup>th</sup> June 2013

### **Web-based lending platforms**

Crowdfunding platforms have primarily existed on the internet which leads to the conclusion that they belong to the domain of virtual markets (Hagel and Armstrong, 1997). In relation to Crowdfunding, these virtual markets are characterized by high level of connectivity, focus on transactions, interaction and feedback (Amit and Zott, 2011). Such as Hagel and Armstrong state, *“a community must be in place before commerce can begin”* (Hagel and Armstrong, 1997:16). In a study of 390 crowdfunding platforms, Villarroel and Onofre find that there is a systematic ‘global bias’, suggesting that this virtual financial system could make a real impact on the lives of millions of individuals across national borders (Villarroel and Onofre, 2013).

Internet based lending has become a great means of capital acquisition, and an increasingly popular form of “crowd-sourced” microfinance. This category is not exclusive to Kiva which created their own niche in this market by providing zero-interest loans to entrepreneurs in need. Other leaders in on-line lending platforms like Prosper and Lending Club, differ in mission and scope, as all charge an interest rate to the entrepreneur in need and are therefore less relevant to the focus of this study. Prosper provides an auction model with an average interest rate of 7.04% and Lending Club offers a financial marketplace where the investor can choose between a high-risk or low-risk borrower (Hartley, 2010), and both are P2P (peer-to-peer lending) whereas Kiva is not P2P as it uses an intermediary local organization (Field Partner)<sup>3</sup>.

### **Kiva.org**

Kiva platform was founded in October 2005 by Matt and Jessica Flannery in California (Flannery, 2007) and is *“one of the pioneers in the provision of microfinance”* (Gajjala et al., 2011: 884). The non-profit organization aims to *“empower people around the world with a \$25 loan”* and its mission is to *“connect people through lending for the sake of alleviating poverty”*<sup>4</sup>, see Appendix 1 and 2.

Kiva is a *“micro-lending”* platform (Gajjala et al., 2011: 884), also known as “social lending”, because of its zero per-cent interest yield for the lenders. Lenders<sup>5</sup> choose to which entrepreneurs (borrowers) they want to lend their money to anywhere in the world through the Kiva platform.

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<sup>3</sup> See Picture 1 below

<sup>4</sup> Source: <http://www.kiva.org/about> Last accessed 19<sup>th</sup> June 2013

<sup>5</sup> See below the explanation of Kiva Stakeholders



i) *Kiva Stakeholders*

Kiva **lenders** are the worldwide users of the Kiva platform who are lending or donating money to selected entrepreneurs or projects shown at the platform. These entrepreneurs constitute the **borrowers**.

*“Through Kiva, not only people lend money to help those in need, but they also have the opportunity to connect and potentially to build relationships”* (Gajjala et al., 2011: 884).

The Kiva community *“includes various categories by which teams of lenders are organized”* (Gajjala et al., 2011: 884-885) such as the ones built around the same political views (Team Obama), religious views (Kiva Atheists), or nationality (Team USA) see Appendix 3 and 4.

At this point, it can be argued that Kiva is a hybrid organization that combines philanthropy with business (O’Brien, 2008), for being born on the Web, for succeeding in empowering emerging entrepreneurs, and for reaching a global and sustainable scale. (Newholm and Shaw, 2007).

In this context, Kiva has built a unique community and managed to grab their everyday focus by facilitating peer interaction with “Kiva Teams”. An interesting factor here is that the two most numerous Kiva Teams have a religious nature and are competing in terms of “number of members” and in terms of “amount of loans”. For example, the two most numerous Kiva Teams are *“Kiva Atheists, Agnostics and Free-Thinkers”* with 25,940 members who have lent \$11.3M in 384,670 loans, followed by “Kiva Christians” with 11,554 members who have lent \$7.3M in 210,188 loans (see Appendix 3).

In April 2012, 81%<sup>6</sup> of the borrowers on Kiva were women. Today<sup>7</sup>, women represent 60% of the borrowers with projects on the platform. Kiva focus on women because they are the ones who have the most to gain from microcredit, especially in developing countries where male division of labour still dominates and most of the family’s resources are allocated to males rather than females (Ruth, 2012).

Kiva operates on 72 countries, Philippines, Kenya and El Salvador being the top 3 countries with most projects on Kiva platform. The repayment rate is 99%<sup>8</sup> and each Lender makes on average 10 loans.

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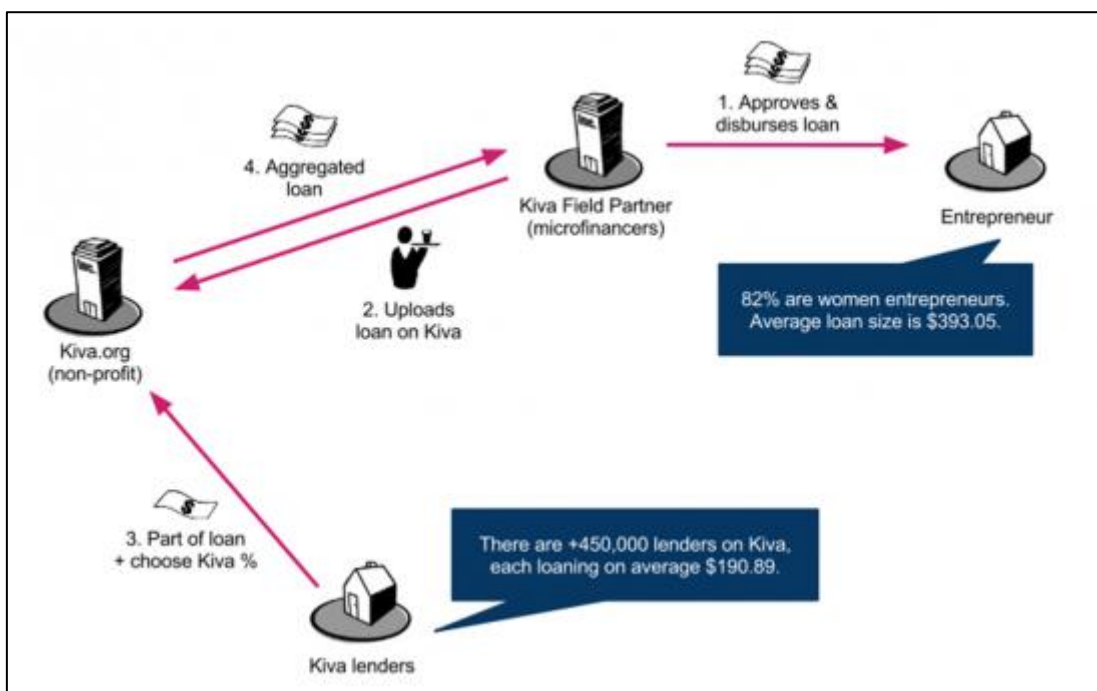
<sup>6</sup> Statistics from April 1<sup>th</sup>, 2012 at <http://www.kiva.org/about/stats>

<sup>7</sup> Statistics from September 11<sup>th</sup>, 2013 at <http://www.kiva.org/lend>

<sup>8</sup> Statistics from September 11<sup>th</sup>, 2013 at <http://www.kiva.org/lend>

## ii) *Business Model*

Kiva's business model can be summarized as follows: Lenders first select an entrepreneur (borrower) according to their profile and story description on Kiva.org to whom they can provide a loan as little as \$25 on Kiva, via PayPal. At the very same time, a number of field partners, local microfinance institutions, are responsible for the local operations by identifying Borrowers in need, delivering the loan, and collecting it back (with interest only to the field partner). A great number of Kiva volunteers work along with the field partners to supervise and keep track of the loan. Finally, the loan is repaid to the Kiva lender (without interest) and he can choose to withdraw the money or re-invest it. Kiva's business model is summarized in the graphical representation below.



Picture 1 - Graphical illustration of Kiva's Business Model<sup>9</sup>

For further illustration of the several steps that a lender faces when donating money on Kiva refer to the Appendixes 5, 6 and 7.

## Religiosity

In order to understand the concept of Religiosity, one must first understand what religion stands for. Glock and Stark have proposed the following definition: “*Religion, or what societies hold to be sacred, comprises an institutionalized system of symbols, beliefs, values, and practices*

<sup>9</sup> De Ridder, May 2010 at <http://www.boardofinnovation.com/2010/05/21/>

*focused on questions of ultimate meaning.*” (Glock and Stark, 1965: 4). Considering the Catholic religion as an example, the symbol is a cross, the beliefs are the resurrection of Christ and other biblical happenings, values are the “Ten Commandments of God” listed in the Bible sacred book, and practices can refer to church attendance and praying.

More recently Koenig et al. (2000) gave his understanding of Glock and Stark’s definition: “*An organised system of beliefs, practices, rituals and symbols designed to facilitate closeness to the sacred or transcendent (God, higher power or ultimate truth/reality), and to foster an understanding of one’s relation and responsibility to others in living together in a community.*” (Koenig, McCullough & Larson, 2000: 18)

The function of religion is to provide a source of meaning and purpose (Peterson and Roy, 1985). As a cultural phenomenon, religion has a certain influence on the individual’s values, routines, attitudes and lifestyle, which ultimately impacts their decision behaviour (Delener 1994). Delener (1994) carried out a study among 76 Jews and 131 Catholics from USA where he concluded that, in religious households in general, husbands exerted more influence on where to purchase an automobile. This is consistent with McMurry’s (1978) conclusion that a higher religious involvement would portray more traditional gender attitudes.

Essoo and Dibb (2004) conducted a similar study in Mauritius with Hindu, Muslim and Catholic consumers confirming that religiosity impacts their shopping behaviour. Devoted individuals revealed different levels of involvement in their decision buying process than less-devoted (religious) individuals. This research focuses on the differences in the lending behaviour of Kiva Lenders, in respect to their religiosity involvement. Such differences impact decision behaviour patterns that ultimately affect not only for the Kiva platform, but also for platforms whose audience is similar in demographics to the one in this study<sup>10</sup>.

## **Spirituality & Religiosity**

Spirituality is the broad term that defines the extent to which an individual feels a personal and experiential connection towards a Higher Entity (Shafranske and Maloney, 1990).

For an individual, to be spiritual means having a transcendental feeling towards a superior entity and does not necessarily mean adopting a certain religious belief. Hence, Spirituality may or may not include Religiosity (see definition below); it can manifest itself within or without a religious context (Shafranske and Maloney, 1990).

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<sup>10</sup> Demographics of the respondents can be found in Methodology section, pp. 18-19.

An American Sociologist of Religion, Wade Clark Roof (2000) introduces an explanation for the term “Spiritual” based on a large-scale survey of the post-World War II baby-boom generation present in his article "The Post-War Generation and Religion in the United States: A Window to Fifty Years of Change" (1993). Roof believes that due to a high level of fluidity of people moving in and out of religious groups, there has been a change in the style of Spirituality described as "reflexive," with its emphasis on self-engagement, exploration, and process. Spiritual is now commonly used to identify oneself, and has a detachment of the word "Religious". “Pure-spirituality” as we later refer in the present research, is based on Roof’s (2000) and Shafranske and Maloney’s (1990) understanding of Spirituality.

Religiosity represents the extent of an individual’s devotion to the practices and beliefs of an organized religious institution. Religiosity is found to be synonymous with concepts as religiousness, holiness, devotion and orthodoxy. In its essence, religiosity measures the extent to which someone is religious or not (Shafranske and Maloney, 1990).

The instruments that measure both Spirituality and Religiosity in scientific research need to take into account the overlapping, the interaction and the disparity between both terms, so they can be independently and dependently assessed (Tsang and McCullough, 2003).

In order to better understand Spirituality and Religiosity, the graphical representation below was created in order to picture and clarify both concepts in the light of the presented theories (Shafranske and Maloney, 1990; Roof, 2000; Tsang and McCullough, 2003).

As the illustration (picture 2 below) suggests, Religiosity is considered a subset of Spirituality as it is understood by Shafranske and Maloney (1990). This is so because Religious individuals seek a deeper attachment to a particular nominated Higher Entity, whereas Pure-Spiritual individuals don’t (Roof, 2000). Note that a Religious individual is necessarily a Spiritual individual, but the reverse does not apply (Shafranske and Maloney, 1990). Dr. Alfredo Teixeira subscribes this line of thinking *“Spirituality is an area of liberation that categorizes all the religious people who do not want to be bound to certain institutionalized creeds. Spirituality is a certain decomposition of the Religiosity that embraces all the individuals who deny the institutionalized religious context. With this clear distinction I believe that the illustration suits its purpose.”*<sup>11</sup>

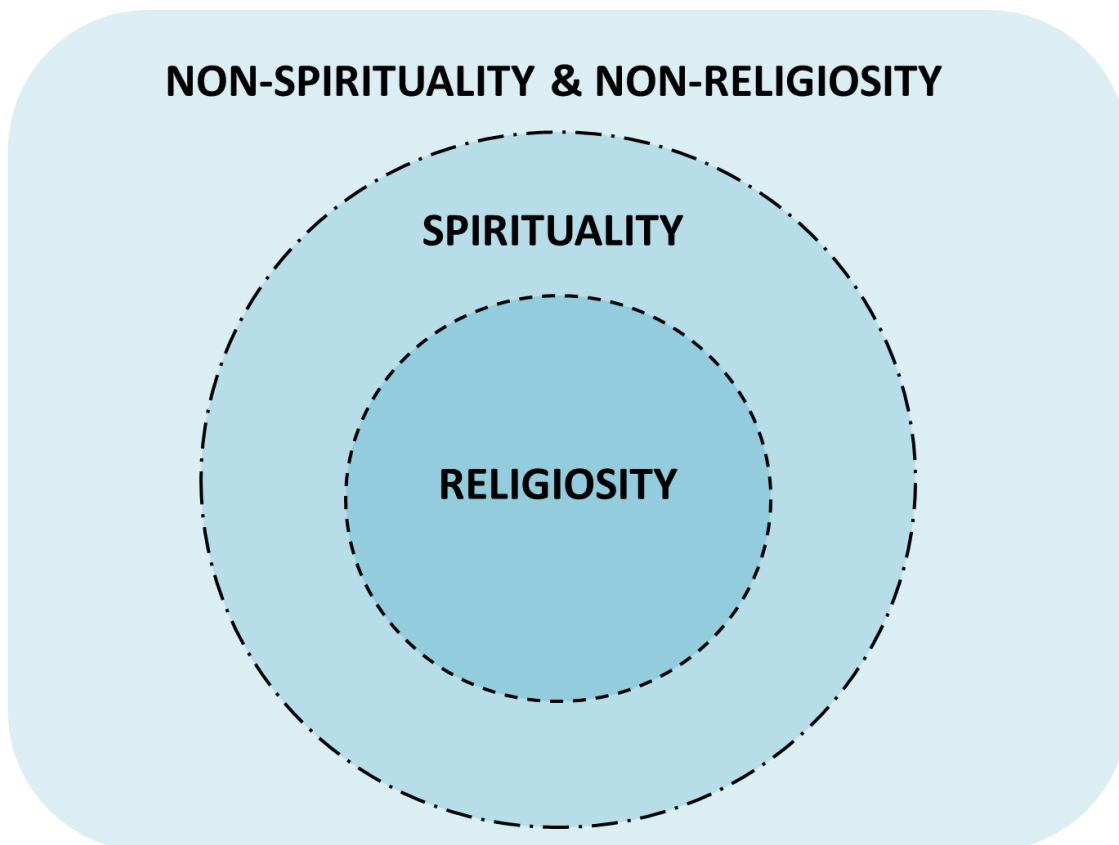
An individual who is both Spiritual and Religious is someone who believes in a Higher Entity and is able to name such entity “God” or “Allah”, and therefore belongs to the “Christianity” or “Muslim” religion. A pure-Spiritual individual cannot name the Higher Entity (Zinnbauer & Pargament, 2005) and, as an example, can be someone who shares one of the Gnostics religious

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<sup>11</sup> Further thoughts on Religiosity and Spirituality are provided by Dr. Alfredo Teixeira in the appendix 9

beliefs. Gnosticism is a heretical movement based on the idea of knowledge of transcendence incorporated by intuitive means.

As for a Non-Spiritual individual (and necessarily non-religious) an illustration of his beliefs can be the Atheism or Agnosticism philosophies: the refusal (Atheism) or indifference (Agnosticism) towards any belief in a Higher Entity and religion. Dr. Isabel Cardoso states *“Religiosity indicates a belonging to a certain religion that follows certain sacred laws, rituals and doctrine. (...) Having a religious intuition – which you suitably call Spirituality – is the feeling that there is something extraordinary out there. The Atheism denies completely this intuition or Spirituality. A religious individual is able to define this intuition/mystery by belonging to a certain religion, such as Christianity or Hinduism.”*<sup>12</sup>



**Picture 2 - “Contemporary world of Spirituality and Religiosity”, by Vanessa Pinto, J. Andrei Villarroel and contribution of Isabel Cardoso and Alfredo Teixeira, July 2013**

This graphical representation illustrates Spirituality and Religiosity in light of recent studies (Shafranske and Maloney, 1990; Wade Clark Roof, 2000; Tsang and McCullough, 2003).

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<sup>12</sup> Further thoughts on Religiosity and Spirituality are provided by Dr. Isabel Cardoso in the appendix 8

### **From Religiosity to Pro-Social behaviour**

The term “pro-social” behaviour was first introduced by Solomon et al. (1990). Such behaviour is characterized by an individual’s need for helping, sharing, and other voluntary positive actions towards others, namely disadvantaged individuals, for which the motive is unspecified, unknown, and not necessarily altruistic (Eisenberg, 1982).

Substantial research has covered the relationship between Religiosity and pro-social behaviour and some of the psychological theories assume that Religiosity contributes positively to pro-social behaviour to a certain extent, as it is related to a genuine concern with others’ welfare (Hardy and Carlo 2005; Reitsma et al. 2006; Batson et al. 1993)

A study from Hardy and Carlo (2005) among 142 high school students in the USA identified Religiosity as a significant predictor of kindness, anonymous and altruistic pro-social behaviour. The sample included 63% female students, 18% with no religious affiliation, 78% Christian and 4% affiliated with other religions. Data was voluntarily collected via self-report questionnaires administered to the students in their classrooms. In order to measure pro-social behaviour, a composite of questions was created to tap three areas of Religiosity: commitment, involvement and identity, measuring on a scale from 1 (not at all important) to 5 (very important) which revealed that higher religiosity was significantly associated with higher altruistic pro-social behaviour.

More recently, according to a study from Reitsma et al. (2006) tested for cross-national effect differences in representative samples of seven European countries, supported the same theory: *“Church attendance, dogmatic conviction and a consequential religious attitude affect intentional donations positively. The religiosity of one's network does have an additional effect. Partner's church attendance is positively related to willingness to donate. However, people with mainly friends with the same religious opinions are less willing to donate (to charity).”* (Reitsma et al, 2006: 347)

Batson et al. (1993) admits a certain positive correlation between pro-social behaviour and Religiosity, but introduces a new dimension of scepticism. According to their work in 1993, religion entails a shift from altruism limited to the one’s neighbourhood and personal connections towards a cultural altruism extended to a larger community. That is, religions emphasize the religious community as the focus of human co-operation, but just as selfish genes select for altruism toward genetically related kin (Dawkins, 1976), religion similarly acts as a ‘selfish gene’ that selects for altruism toward members of the religious in-group. In his own words, *“This evidence strongly suggests that the more religious show no more active concern for others in need than do the less religious. The more religious only present themselves as*

*more concerned.*” (Batson et al, 1993:342) Conclusion is that religious people lend as much as the non-religious.

In “Prosocial Behavior and Religion: New Evidence Based on Projective Measures and Peer Ratings” Saroglou et al. (2005) state that: *“The assumption of the four studies reported here is that the impact of religiousness on pro-sociality is limited but exists (...). In Study 2 (N= 105), female students' religiosity was associated with willingness to help close targets in hypothetical situations but the effect was not extended to unknown targets. In Studies 3 (N= 315, 105 triads) and 4 (N= 274, 109 targets), religious targets not only reported high altruistic behaviour and empathy, but were also perceived as such by peers (friends, siblings, or colleagues) in three out of four cases.”* (Saroglou et al., 2005:323)

In other words, Saroglou et al. (2005) was able to conclude that there exists a limited positive correlation between Religiosity and pro-sociality. The term “limited” suggests a minimal level of pro-social behaviour such as low-cost actions that does not expand to high-cost actions (donations). This finding is in line with social psychologists (Batson et al. 1993) whose research also suggests that the effect of religion on pro-social behaviour is limited to low-cost actions.

In their second study, Saroglou et al. find that religious women are prone to help a family member or close person in need, but not necessarily an unknown target in need. From the in-group to the out-group distinction, it seems that when the hypothetical targets appear as threatening values, religion predicts no helping. Again, such findings corroborate social psychologists work such as Batson et al. (1999) and Jackson and Esses (1997).

Similar studies conducted within the context of intergroup relations (pro-social tendencies of religious people toward targets that appear as threatening their values) lead to the conclusion that individuals with a highly degree of Religiosity reveal prejudice and discrimination against targets perceived as out-group members and/or targets with threatening values such as members of other religions, atheists, women, gays and lesbians (Hall et al., 2010; Hunsberger and Jackson 2005; Goldfried and Miner 2002)

More recently, Blogowska and Saroglou (2011) explored this limited pro-social behaviour of highly religious individuals towards out-group members. They concluded that highly religious individuals, predict a limited pro-social behaviour to proximal targets rather than distal targets. They (N=212 Polish students) are more willing to help friends but not unknown people in need in the same hypothetical situations (in the same misfortune or same need of help). This is in line with Spilka et al. (2003), Saroglou et al. (2005), Batson et al. (1999) and Jackson and Esses (1997).

In its piece of work Saroglou et al. (2005) analysed Spirituality as an independent variable in order to assess its correlation with pro-sociality, and to what degree it is different from Religiosity. *“We were careful to make a distinction between religiosity and spirituality, since an emerging debate exists on whether contemporary spirituality implies individuality and self-interest or highly internalized pro-social values (see, e.g., Bellah et al. 1985; Dillon, Wink, and Fay 2003)”* (Saroglou et al., 2005:326).

Interesting enough, results showed that spiritual people (or “pure-spiritual” as we later refer to them in the present research) demonstrate a pro-social behaviour towards both close targets (in-groups) and unknown targets (out-groups), as opposed to religious people. *“Contrary to religiosity measures, the importance of spirituality in life was associated with willingness to help both close and unknown targets. The present results are in line with increasing evidence that modern changes on the religious landscape and an increase of importance attributed to spirituality are followed by a shift from in-group focused to universalistic ethics, values, and behaviours (Saroglou 2003; Saroglou, Delpierre, and Dernelle 2004).”* (Saroglou et al., 2005:331).

Although a lot of research has been done in the importance of religion as a strong psychological and sociological factor that impacts donations (Reitsma et al, 2006) and pro-social actions (Hardy and Carlo, 2005; Batson et al, 1993; Saroglou et al. 2005; Blogowska and Saroglou 2011), none has focused in the existing (or non-existing) correlation in Crowdfunding platforms. This study aims to understand how Religiosity and Spirituality impact social lending by conducting a research on the Crowdfunding website Kiva.org.



# Research Hypothesis

This study intends to test if Religiosity has influence in the pro-social behaviour of an individual, with the empirical evidence from the Crowdfunding platform Kiva.org.

Research considers the altruistic values of an individual as a possible basis for pro-social behaviour. As the existent literature suggests (Batson et al. 1993, Spilka et al. 2003 and Saroglou et al. 2005) altruistic values and beliefs are often the basis for why certain individuals show a pro-social behaviour. Such altruistic self-identification of an individual is often misled by religious individuals as religious commitment (or religious values). Therefore the altruistic values in this study are assessed on all individuals (all dataset), religious and not religious.

**H1: The altruistic values of an individual influence positively her or his pro-social behaviour on online financial contributions on Kiva.**

The work from Saroglou et al. (2005) states that pure-spiritual individuals display a higher degree of pro-social commitment than religious individuals do. As a result, the second hypothesis of this work will assess pure-spirituality independently from religiosity as to not bias results (Tsang and McCullough, 2003).

**H2: Pure-spiritual individuals display a higher pro-social behaviour on online financial contributions on Kiva than religious individuals.**

There is ambiguity whether Religiosity is a predictor of pro-social behaviour or not. Some studies (Hardy and Carlo, 2005; Reitsma et al., 2006; Batson et al. 1993) have found that Religiosity has a positive correlation on pro-social behaviour. Other studies (Saroglou et al. 2005, Spilka et al. 2003, Blogowska and Saroglou 2011) admit a limited, if not nil (Hall et al., 2010; Hunsberger and Jackson 2005; Goldfried and Miner 2002) positive correlation between Religiosity and pro-sociality, and explore possible reasons for why it is so, namely the out-group distinction (different values).

Based on the aforementioned academic literature, and using the proposed study:

**H3: The religiosity of an individual influences positively his or her pro-social behaviour on online financial contributions on Kiva.**

Bergan and McConatha (2000) and Ellison et al. (1991) argue the higher the “private devotion” and “social integration” of a religious individual, the more religious he is. Reitsma et al. (2006) remarks that church attendance affect intentional donations positively. The empirical evidence of these two hypotheses reinforces H3:

**H3.a: Individuals who attend religious services regularly are more willing to make pro-social financial contributions than those who don’t.**

## Methodology

After an exploratory study of the Kiva community, a questionnaire for Kiva lenders was designed, and launched online in QuestionPro (such was the result of a collaborative effort from Filipe Estrela, Sebastiano Fortis, Vanessa Pinto and Professor Andrei Villarroel in our thesis seminar). The survey questions regarding the Religiosity level were constructed following the process suggested in Guttman’s scale analysis (Guttman, 1950), in order to find a good discriminating ability to measure it. The wording was designed for the Kiva Community and the questions were tailored to measure the Religious and Spiritual affinity of Kiva lenders.

A total number of 5031 respondents begun taking the survey, and 3928 completed it, with a completion rate of 78%. 99% of respondents indicated they had lent money through the Kiva platform, so their answers were valid for the research question at hand. The sample of 3928 is characterized as: 55% female, mostly between 30-40 years old, from English-speaking countries USA 50%, Canada 8%, UK 6% and Australia 5%. 37% of them have a Bachelor degree, and 31% a Master degree. Only 1% of them have less than high school degree. Most of them are Married (50%) and employed (55%) or self-employed (16%) against 5% students, 12% retired and 3% of unemployed. 80% of them belong to a Kiva Team, and have been active on Kiva for more than 3 years.

## Variables

In order to provide a clear understanding of the statistical variables used in this study, two tables are represented to summarize and illustrate such variables.

The following table summarizes the list of variables included in the analysis.

<b>Dependent variable</b>
NR_LOAN
<b>Independent variables</b>
PRINCIPLES
PURESPIRITUAL
BELIEVE
RELIGIOSITY
ATTEND
<b>Control variables</b>
AGE
GENDER
EDUCATION
TENURE

Table 1 – List of variables considered in the statistical analysis

### *i) Dependent Variable – Number of Loans*

The performance metric used is the number of loans that the lender has invested in at Kiva. This is the total amount of loans that each individual lender has done from the start. It allows to evaluate an individual's engagement with kiva platform, and ultimately, with pro-social activities, because it relies on a periodic (or frequency) pattern. The frequency of loans is a good measure to predict a consistent pattern of pro-social behaviour than the amount of money lend, as it measures regularity in time and involvement with the targets in need (borrowers).

### *ii) Independent Variables*

The following table illustrates each independent variable, mainly who they are targeted to in the religious and non-religious context:

NON-BELIEVER	BELIEVER	
NON-SPIRITUALITY	SPIRITUALITY	RELIGIOSITY
“Does NOT believe in a Higher Entity”	“Believes in a Higher Entity”	“Believes in (eg.) Allah, Buddha, Jesus”
*principles		
	*believe	
	*purespiritual	*religiosity
		*attend

Table 2 – “Independent variables from Spirituality to Religiosity”, by Vanessa Pinto and J. Andrei Villarroel, July 2013

### Self-identification Principles – PRINCIPLES

The personal principles represent an aggregated variable (includes data from three cumulative questions in the survey) that assesses the individuals’ principles or values. The objective of this variable is to understand if subjective values, which vary from individual to individual, are a predictor of pro-social behaviour. In order to reduce its ambiguity, Kiva lenders were asked how they felt about “the inequalities and suffering in the world”: firstly if they thought about it; secondly if they felt a sense of responsibility for reducing it; and lastly if they had ever made financially contributions as a mean to reduce this inequalities.

This is the only variable in the study that is independent from Religiosity or Spirituality and is targeted to all individuals: non-spiritual and non-religious, spiritual, and religious (as the above table suggests).

### Pure-Spirituality – PURESPIRITUAL

As it can be understood from the above table, and as it was discussed in the literature review, an individual can be spiritual but not necessarily religious. This Spirituality was coded in this study as “Pure-spiritual” and represents all the individuals who claim to believe in a Higher Entity but refuse any attachment to a religion.

**Religiosity Level - RELIGIOSITY**

The Religiosity level was assessed through a cumulative question as it had to provide a good discriminating ability in order to cover different levels of religious involvement with whom the interviewed individuals could identify with. The objective was to reduce bias and reduce the dropout rates (in case the interviewers did not find identification in any option). As a result three different levels of religious involvement were constructed, as it is illustrated in the following table.

Please note that an individual who is characterized as a “Religious (low)” is someone who believes in a higher entity and feels attached to a religion whereas a “Religious (medium)” is an individual who, in addition to the previous, participates in the ceremonies of the community. For an individual to be considered “Religious (high)” not only he participates in the ceremonies of the community but he also embraces his religion and lives accordingly to the ideologies, principles and beliefs of his religion.

<b>Religiosity Level</b>	<b>Believes in a Higher Entity</b>	<b>Feels attached to a particular religious belief</b>	<b>Is active in the religious community</b>	<b>Lives accordingly to the religion's ideologies, principles and beliefs</b>
<b>Religious (low)</b>	YES	YES		
<b>Religious (medium)</b>	YES	YES	YES	
<b>Religious (high)</b>	YES	YES	YES	YES

Table 3 - Description of the cumulative religious levels considered in the survey

**Belief in a Higher Entity – BELIEVE**

The literature (Saroglou et al. 2005, Shafranske and Maloney, 1990; Roof, 2000; Tsang and McCullough, 2003) suggests an independent analysis of pure-spiritual individuals, religious individuals, and individuals who believe in a Higher Entity (both religious and pure-spiritual, generically called “spiritual”<sup>13</sup>). In order to understand the individual impact on the regression between individuals who believe in a Higher Entity, and individuals who are exclusively pure-spiritual (PURE-SPIRITUAL) and exclusively religious (RELIGIOSITY) this variable was generated as an aggregation of both. BELIEVE covers all individuals except the ones who clearly state that do not believe in a Higher Entity of any kind. Mathematically,  $PURE-SPIRITUAL + RELIGIOSITY = BELIEVE$ .

<sup>13</sup> Detailed explanation on page 15, Picture 2

## **ATTEND**

In order to assess the intensity of devotion that an individual demonstrates towards his religion, as suggested by Bergan and McConatha (2000), Ellison et al. (1991) and Reitsma et al. (2006) I ought to measure how periodically the individuals attends religious services. This variable was only assessed on the Kiva lenders who feel attached to a particular religion (RELIGIOSITY).

### *iii) Control Variables (Tenure, Age, Education, Gender)*

## **TENURE**

TENURE reveals for how long the individual have been present on the Kiva Community. Obviously, the longer an individual has been on Kiva, the higher the likelihood of having a bigger portfolio of invested loans in the platform.

## **Method**

Two statistical programs were used in order to process the data and to test the hypotheses for this study: JPM and STATA.

### *i) Data Analysis*

In order to proceed with the analysis of the raw data extracted from the survey, the program JMP was used. It generated a figure of graphics and reports from the raw data that allowed a better understanding of the dataset. Also, the extensive questions (Yes/No) were grouped in the report making it much easier to compare the answers.

### *ii) Statistical Analysis*

After analysing the dataset, the statistical software STATA was used to test the hypotheses. An OLS regression of the number of loans (dependent variable) was used for this analysis.

## Results

Distinct groups of variables were considered in order to better understand the background of this study and the religious context surrounding of the respondents.

### Religiosity identity of Kiva Lenders

#### i) *Religiosity and Spirituality* (n=3928)

Non-Religious	<b>60,0%</b>
Religious	<b>40,0%</b>
	<b>100,0%</b>

**Table 4 - Religiosity identification**

The first data about religiosity leads to the conclusion that 60% of the interviewed Kiva members do not feel attached to any religion. 33% consider themselves completely Non-Spiritual, 27% Spiritual as they believe in a higher entity, 25% believe in a higher entity and feel attached to a religion, and only 15% consider themselves Devoted (religious ++) to their religion.

#### ii) *Attendance* (n=1553)

<b>Attendance</b>	
More than once a week	<b>11%</b>
Once a week	<b>29%</b>
Less frequently	<b>59%</b>
	<b>100%</b>

**Table 5 - Attendance of religious services**

Only 40% of the religious individuals attend religious services once a week or less than once a week.

#### iii) *Religious beliefs* (n=3859)

The most statistically relevant religions among our study are “Atheism” 20%, “Agnosticism” 16%, “Buddhism” 5%, “Catholicism” 10%, “Protestantism” 9% and “Unitarian Universalism” 3%. 8% of the respondents chose “Prefer not to say” and 32% chose “Other”.

## Statistical Results

The table presents seven different regression models that evaluate the impact of Religiosity and Spirituality on the frequency of loans made by a Kiva Lender.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
PRINCIPLES		•	•	•	•	•	•
PURESPIRITUAL			---				
BELIEVE				---	---	---	---
RELIGIOSITY					•	•	--
ATTEND							+++
AGE	+++	+++	+++	+++	+++	+++	+++
FEMALE	---	---	---	---	---	---	---
EDUCATION	•	•	•	•	•	•	•
TENURE	+++	+++	+++	+++	+++	+++	+++

**Table 6 - Impact of religiosity in number of loans**

+++ (positive impact  $p < 0.01$ ), --- (negative impact  $p < 0.01$ ), -- (negative impact  $p < 0.05$ ), - (negative impact  $p < 0.1$ ), • (not statistically significant)

Please refer to the appendixes 11 and 12 for the full statistical analysis and results.

The base model 1 includes the control variables – Age, Female, Education and Tenure.

The model 2 introduces the PRINCIPLES variable that corresponds to the self-identification altruistic principles of the respondents. Results reveal that PRINCIPLES have a negative impact in the frequency of loans of -0.081 which does not change over time, although not being statistically relevant, which means nothing can be concluded. These results do not accept nor reject the **H1: “The altruistic values of an individual influence positively his or her pro-social behaviour on online financial contributions on Kiva.”**

The model 3 introduces the PURE-SPIRITUAL individuals. This variable is only measured (isolated) in model 3, so that it does not bias the subsequent results (Tsang and McCullough, 2003). Results reveal that a pure-spiritual individual (someone who believes in a higher entity but it's not attached to a religion) has a significant negative impact in the frequency of loans - 0.328( $p < 0.01$ ). Such goes against the literature Saroglou et al. (2005) which indicates that pure-spiritual individuals display a pro-social behaviour towards in-groups and out-groups. These results disprove **H2: “Pure-spiritual individuals display a higher pro-social behaviour on online financial contributions on Kiva than religious individuals”.**



The model 4 introduces the variable BELIEVE that corresponds to believing in a higher entity and includes both pure-spiritual and religious individuals. Seemingly to the previous, results indicate that the variable BELIEVE has a significant negative impact in the frequency of loans - 0.281( $p < 0.01$ ) and tends to increase up to -0.477( $p < 0.01$ ) with the introduction of RELIGIOSITY, REL\_REL and ATTEND variables. This is in line with the fact that “Kiva Atheists Team” being more successful in terms of more members and more money lend on Kiva than “Kiva Christians Team”<sup>14</sup>.

In model 5, the variable RELIGIOSITY is introduced. The regression reveals that Religiosity has a negative impact in the frequency of loans -0.010 which is not statistically relevant in model 5, but dramatically increases in model 7, to -0.098( $p < 0.05$ ). This impact is much more significant when ATTEND (model 7) is added to the statistical analysis.

The variable ATTEND (model 7) shows a positive correlation of 0.144( $p < 0.01$ ). Note that the question in the survey that originated the variable ATTEND decreases his frequency among the options (see appendix 10). Therefore a 0.144( $p < 0.01$ ) indicates a negative impact in the frequency of loans, and so disproving **H3.a: “Individuals who attend religious services regularly are more willing to make pro-social financial contributions than those who don’t”**.

In model 6 the religiosity level has a negative impact in the frequency of loans of - 0.395( $p < 0.01$ ). This means that the higher the Religiosity of an individual, the lesser will be its frequency of loan investment in Kiva. These results prove opposite to **H3: “The religiosity of an individual influences positively her or his pro-social behaviour on online financial contributions on Kiva”** which is in line with **H3.a**, which was also found opposite.

As for the control variables, TENURE has a highly significant positive impact in the frequency of loans of 0.416( $p < 0.01$ ) across all models. This means that the longer an individual has been active on Kiva, the higher is the number of loans that he has made, which is expected. Female (gender), on the other hand, shows a highly significant negative impact in the frequency of loans of -0.685( $p < 0.01$ ) revealing that female Kiva Lenders, which amount to 55% of the surveyed, lend less frequently than men. Education has no significance.

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<sup>14</sup> According to the results last assessed June 19<sup>th</sup> 2013, see appendix 3

## Limitations

This study analysed a sample of individuals from the micro-lending platform Kiva.org. One limitation is that the study was conducted only in this one platform. Although the sample was comparatively large, some bias might be associated with Kiva platform, especially since it has unique features<sup>15</sup> (Kiva Teams and Field Partners).

Another limitation is that most of the surveyed individuals are from the USA, and almost the whole sample is from English-speaking countries (Canada, Australia, and UK). Naturally, this introduced some bias in their Religiosity and Spirituality, as such countries are developed and religion plays a different role than, for example, southern European countries or even South America countries<sup>16</sup> (Henrich et al., 2010). However *“the United States is one of the rich countries that bucks the trend”*<sup>17</sup> as 73-76% of USA citizens are Christians and about 15-20% have no religious affiliation (Kosmin and Keysar, 2009). Canada<sup>18</sup>, UK<sup>19</sup> and Australia<sup>20</sup> follow this irregularity, although having a higher rate of non-religious citizens (between 22-25%). As 69 % of our respondents were from one of these English-speaking countries (USA, Canada, UK, Australia), the above limitation is poor.

It is important to bear in mind the context of online platforms. Dr. Alfredo Teixeira argued in his interview *“the typical user of a platform like this is an educated, wealthy individual, and these individuals, anthropologically, tend to be less religious than people who are not so wealthy and not so educated. In this way you may find an over-representation of these non-religious individuals in your survey, and you must be alert to the context you are investigating, and not make unwise conclusions such as non-religious people donate more than religious people.”*<sup>21</sup> The population of online lending platforms can be a biased representation of the reality as most of the interviewed lenders are very educated and wealthy, which ultimately correspond to a target in society known for having a crescent disbelief in religiosity<sup>22</sup>, and therefore being less exposed to pro-social actions practiced within a religious context – and ultimately seeking for alternatives, being online lending pro-social platforms considered as one.

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<sup>15</sup> See Picture 1 on pp.11

<sup>16</sup> <http://www.gallup.com/poll/142727/religiosity-highest-world-poorest-nations.aspx>

<sup>17</sup> Citation from <http://www.gallup.com/poll/142727/religiosity-highest-world-poorest-nations.aspx>

<sup>18</sup> Source <http://www.statcan.gc.ca/daily-quotidien/130508/dq130508b-eng.htm?HPA>

<sup>19</sup> Source <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-286262>

<sup>20</sup> Source

<http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/2071.0Main%20Features902012%E2%80%93013>

<sup>21</sup> More in appendix 9

<sup>22</sup> Source: <http://www.gallup.com/poll/142727/religiosity-highest-world-poorest-nations.aspx>

Another important factor to be considered is that online pro-social lending differs from traditional giving, and researchers often question whether empirical insights can be extrapolated into the real-world (Levitt & List, 2007). In order to assess this limitation, we asked our respondents *"In the last three years, outside the context of online social lending platforms, how often did you make financial contributions in general (e.g. to charities, foundations, church, NGOs, etc.)"*. 1606 Kiva Lenders answered and 40% of those donate once a month and only 5% never do. This helps reduce the importance of the limitations stated above, as we now know that respondents lend or donate money through other ways than online platforms.

## Discussion and Conclusions

This research aims to generate a better understanding on the possible effect that Religiosity and Spirituality have on pro-social behaviour. Using a pool of 3928 correspondents from Kiva.org platform, our findings reveal that principles (self-identification values) show a negative impact on the frequency of loans made which is not statistically relevant to disprove or accept **H1: "The altruistic values of an individual influence positively his or her pro-social behaviour on online financial contributions on Kiva."** The works from Batson et al. (1993), Spilka et al. (2003) and Saroglou et al. (2005) indicate altruistic principles as the pattern for pro-social behaviour but in this setting nothing can be concluded regarding so. Pure-spiritual individuals reveal a significant negative impact on their frequency of loans on Kiva, which is not in line with Saroglou et al. (2005) and therefore rejects **H2: "Pure-spiritual individuals display a higher pro-social behaviour on online financial contributions on Kiva than religious individuals"**. Results also indicate that the more a (religious) individual attends religious services, the lesser will be his frequency of loan investment in Kiva, disproving **H3.a (Individuals who attend religious services regularly are more willing to make pro-social financial contributions than those who don't)** and **H3 (The religiosity of an individual influences positively her or his pro-social behaviour on online financial contributions on Kiva)** respectively.

These final remarks lead to the following conclusions: (1) Principles as a predictor of online pro-social behaviour on Kiva remain unknown; (2) Pure-spiritual individuals are not more pro-social on Kiva than non-religious people; and (3) Religiosity is not a predictor of online pro-social behaviour on Kiva. In fact the opposite appears to be true: non-religious individuals show a higher *frequency of loans* than religious people. The present study provides evidence that

Religiosity as a predictor of pro-social behaviour is limited and counter to what some theorists and researchers have defended (Hardy and Carlo, 2005; Reitsma et al., 2006; Batson et al. 1993, Saroglou et al. 2005, Spilka et al. 2003, Blogowska and Saroglou 2011). Our findings offer additional support to those of earlier literature (e.g. Hall et al. 2010, Hunsberger and Jackson, 2005 and Goldfried and Miner 2002).

A possible explanation to these conclusions is found in the works of Saragou et al. (2005), Batson et al. (1999), Blogowska and Saroglou (2011) and Jackson & Esses (1997).

Blogowska and Saroglou (2011) discovered that devoted religious people are more altruistic towards a non-feminine target than a feminine target in need and more willing to help friends but not unknown people in need in the same hypothetical situations. As a result, the findings of this thesis reflect such theory, as most of the loans provided on Kiva are mostly for women<sup>23</sup>, and for un-known targets that can be considered out-groups to most religions. This is in line with Hall et al (2010), Hunsberger and Jackson (2005) and Goldfried and Miner (2002) whose research concludes that highly religious individuals display certain discrimination against targets who threaten their values, such as women<sup>24</sup>.

Saroglou et al. (2005:342) conclude that that “*Religious women are liable to help a hypothetical family member or close person in need, but not necessarily a hypothetical unknown target in need*”. Batson et al. (1999) and Jackson & Esses (1997) explored the in-group vs. out-group phenomenon within religious individuals, and was able to conclude that when the hypothetical targets (disadvantaged individuals in need) appear as threatening values, religion predicts low helping. A possible explanation for this can be understood by a study from Lerner (1980) that indicates that Religiosity is positively related to common beliefs; the conclusion being that Religiosity defends the causality idea that an individual’s fate is a result of what he deserves. Furthermore, Kiva is a micro-lending website (Gajjala et al. 2011), and such as researchers (Bruce 2007; Steiner 2007; Stegman and Faris 2003) remark, micro-lending is a novel popular form of crowd-sourced microfinance where individual lenders make unsecured loans to unrelated individual borrowers over the internet. Borrowers are unknown targets most likely to be out-groups, from various religious groups, ethnicities, and cultures.

In addition, the work from Saroglou et al. (2005:343) advances that “*It is difficult to accept the idea of moral hypocrisy in religious people regarding pro-social behaviour.*” (Saroglou et al., 2005:343) Such idea was advanced by Batson et al. (1993) as he concluded that religious people lend as much as non-religious<sup>25</sup>. Although our findings do not provide a direct link with this

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<sup>23</sup> Statistics from September 11<sup>th</sup>, 2013 at <http://www.kiva.org/lend>

<sup>24</sup> See pp. 15

<sup>25</sup> See pp. 16

statement, and H1 (The altruistic values of an individual influence positively his pro-social behaviour on online financial contributions on Kiva) was neither proved nor disproved, it can be concluded that religious (and pure-spiritual) individuals lend *less frequently* than non-religious individuals. According to Saraglou (2003) and Saroglou et al. (2005:344) “*Spiritual people acted in a pro-social way spontaneously when faced with the needs of hypothetical unknown persons*” (in addition to known persons). This is disproved by the findings of Pure-Spiritual individuals (H2). Our research findings imply that pure-spiritual individuals are not more benevolent towards out-groups than religious individuals, when it comes to lending them money. Dillon et al. (2003) argue that Spirituality has a clear link with pro-social altruism, which it’s not reflected in this research. In contrast, Bellah et al. (1985) suggest that Spirituality might reflect an individualistic and self-centered tendency, but from the point of view of this research it is not possible to agree or disagree with this statement, and the reason why Spiritual people do not display a pro-social behaviour on Kiva.org remains unknown.

Stürmer & Snyder, (2010) present pro-social behaviour at an organizational/group level, with implications of a higher consistency on pro-social behaviour due to group cohesion, rather than at an individual level. As stated before, the two biggest Kiva Teams competing at the number of members and loans have a religious nature, with “Kiva Atheists” being more influential on the platform than “Kiva Christians”<sup>26</sup>, which is a clear indicator of the discrepancy and controversy between the two.

The surveyed population of Kiva lenders are rather educated individuals, mostly between 30-40 years old and from English-speaking countries USA, UK and Canada<sup>27</sup>. This sample of Kiva respondents represents a good grasp of the population within other online platforms like Kickstarter, Prosper and other successful Crowdfunding platforms, which suggests that similar results to this research might occur. However nothing can be anticipated without incurring this research on those specific platforms, as it is suggested in the following section, Future Research.

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<sup>26</sup> See appendix 3

<sup>27</sup> More info on surveyed population on page 19

## Practical Implications

Considering the amount of individuals in the business world who are religious or spiritual, from top-managers, to clients, suppliers, employees, etc., Religion is bound to have an impact on their behaviour (Delener 1994; Essoo and Dibb 2004), and consequently, on their decisions. In addition, Crowdfunding is at the spotlight and it is expected to have an increase within the next years<sup>28</sup>.

Conclusions on the religious and spiritual nature of Kiva individuals and their frequency of loans have particular relevance not only for the Kiva platform itself, but also for future online Crowdfunding platforms and consolidated ones. As shown in this research, Pure-spiritual individuals are not more pro-social on Kiva than non-religious people and Religiosity is not a predictor of online pro-social behaviour on Kiva. In fact the opposite appears to be true: non-religious people show a higher *frequency of loans on Kiva* than religious people. In other words, as to illustrate future implications, non-religious people show a *higher engagement with the Kiva platform* than religious people. These findings are particularly useful for micro-lending Crowdfunding platform owners and developers as it deepens their knowledge on the psychological and practical link between Religiosity, Spirituality and engagement levels (with the online platform) which has clear implications to the market they decide to target. These results can be also incorporated into psychology of consumer behaviour, and for marketing considerations of segmentation and targeting.

As such, this study presents new empirical evidence on Religiosity, Spirituality, and the pro-social link, and contributes to a healthy debate in our increasingly interconnected society.

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<sup>28</sup> Source: <http://research.crowdsourcing.org/2013cf-crowdfunding-industry-report>. Last accessed on 19th June 2013

## Future Research

The article from Henrich, Heine and Norenzayan (2010) about the “W.E.I.R.D.” societies (Western, Educated, Industrialized, Rich and Democratic) advances that behavioural scientists publish their works on human psychology mostly based on samples from the W.E.I.R.D. societies, and their findings suggest that “*members of WEIRD societies are among the least representative populations one could find for generalizing about humans*” (Henrich et al., 2010:1). Running the same study including more individuals from other geographic areas than English-speaking countries (or less educated individuals) would also be interesting as a different representation (dataset) of reality could take place. However this would probably require another crowd than the one on Crowdfunding platforms, as their demographics resemble the one from this study<sup>29</sup>. It would also be interesting to conduct the same research on other Crowdfunding platforms from various domains, such as Prosper, Lending Club, Kickstarter and to evaluate if the same conclusions can be extracted.

Levitt and List (2007) argue that online pro-social lending (on the Web 2.0) has a different nature than traditional (“non-online”) giving (charity). Therefore, empirical findings in this setting should be carefully applied into the real world. Future research exploring the gap between online and “non-online” lending on the link between Religiosity and pro-social behaviour would also add to the understanding of this.

A few authors (Batson et al. 1993, Spilka et al. 2003 and Saroglou et al. 2005) advance that Principles are the reason why individuals display a pro-social behaviour in certain situations. In this research nothing could be concluded regarding Principles as function of pro-social behaviour on Kiva. Future research should emphasize on these self-identification principles of an individual and its implications on pro-sociality.

Last but not the least, Spirituality would benefit from additional isolated research (from Religiosity) as few authors (Saroglou 2003, 2013; Saroglou et al., 2012) have explored pro-sociality on spiritual individuals like we did in this study with the variable Pure-Spiritual<sup>30</sup> but with distinct conclusions<sup>31</sup>.

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<sup>29</sup> More info on surveyed population on pp. 19

<sup>30</sup> Further understanding of Pure-Spiritual individuals on pp. 13

<sup>31</sup> See previous section “Discussion and Conclusions” pp. 28

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# Appendixes

## Appendix 1 – Kiva Landing Page



Last accessed 19<sup>th</sup> June 2013

## Appendix 2 – Kiva “About us” Page

About Us

Team

Volunteers

Board and Advisors

Finances

History

Statistics

---

How Kiva Works

---

About Microfinance

---

Social Performance

---

Support Us

---

Field Partners

---


How to become a Field Partner

---

Kiva Fellows

---

### About Us



The people behind Kiva include volunteers, Kiva Fellows, Field Partners, our board, and a team of employees (shown above) and contractors. The Kiva headquarters are located in San Francisco, California.


We are a non-profit organization with a mission to connect people through lending to alleviate poverty. Leveraging the internet and a worldwide network of microfinance institutions, Kiva lets individuals lend as little as \$25 to help create opportunity around the world. Learn more about [how it works](#).

**Last accessed 19<sup>th</sup> June 2013**



## Appendix 3 – Kiva Community: Religious Lending Teams

### Lending Teams: Connect with Kiva's lender community



Join a Lending Team and get to know Kiva's vibrant community of active and inspiring lenders.

Lending Teams are self-organized groups where members connect with each other and rally around shared lending goals.











Start a team and invite your friends. Or join an existing team below.

[Start a New Team](#) [How Teams work?](#) | [My Teams](#) | [Grow your Team with our Playbook](#)

### TEAM LEADERBOARDS

Amount Loaned


THIS MONTH LAST MONTH ALL TIME

	Guys holding fish	\$223,125
	Kiva Christians	\$78,150
	Atheists, Agnostics, Skeptics, Freethinkers,...	\$74,150
	milepoint	\$65,250
	Friends of Bob Harris	\$43,125
	Nerdfighters	\$39,050
	Australia	\$34,375
	GLBT (Gay, Lesbian, Bisexual,...	\$22,250
	TripAdvisor	\$19,550
	Team CANADA	\$17,850

[Search Teams](#) [Clear filters](#)

**Team Listing** 25,555 lending teams in all categories

-- All Categories -- -- All Teams -- Sort by: Total Loaned



**Atheists, Agnostics, Skeptics, Freethinkers,...**

25,945 members have lent \$11,251,950 in 384,888 loans

Earth | Category: Common Interest | Team since: Aug, 2008


We loan because: We care about the suffering of human beings.

[Join Team](#)

## Kiva Lending Team: Atheists, Agnostics, Skeptics, Freethinkers, Secular Humanists and the Non-Religious

A Common Interest team since Aug 28, 2008 [Recommend](#) 715

[About](#) [Loans](#) [Members](#) [Goals](#) [Graphs](#)



**We loan because...**  
We care about the suffering of human beings.

**About us**  
Those of us who know we are one human family.

**\*\*New to the team? Read this:** [is.gd/51mxq](https://is.gd/51mxq)

**\*\* FriendFeed:**  
[friendfeed.com/rooms/aasfshnr](https://friendfeed.com/rooms/aasfshnr)

**\*\* Facebook Group:**  
[is.gd/lzMJ](https://is.gd/lzMJ)

**SECULAR MFI ONLY loan search:**  
[goo.gl/wtDkJ](https://goo.gl/wtDkJ)


**Location:** Earth [Team website](#)


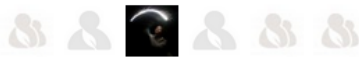
[Join Team](#)

**Latest Messages**

99+ messages. [Join the team to get in on the action!](#)

**Team Activity**

 Batbolor received a loan from 6 team members to purchase a starting inventory for her business.

  **\$1,000 to go**

[Lend Now](#)

**Impact** Updated Daily

**25,945**  
TEAM MEMBERS


**\$11,251,950**  
AMOUNT LOANED

**384,888**  
LOANS

## Kiva Lending Team: Kiva Christians

A Friends team since Aug 31, 2008

[About](#) [Loans](#) [Members](#) [Goals](#) [Graphs](#)



**We loan because...**  
Pure and undefiled religion before God the Father is this: to care for orphans and widows in their misfortune and to keep oneself unstained by the world. (Jam. 1:27)

Link to information regarding Christian partners  
[www.gerv.net/info/christian-field-partners](http://www.gerv.net/info/christian-field-partners)

**About us**  
A group of believers in Jesus Christ, brought together through a common purpose: to help those in need around the world.

Location: Worldwide [Team website](#)


[Join Team](#)

### Latest Messages

99+ messages. [Join the team to get in on the action!](#)

### Team Activity

All Activity

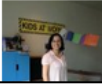


Gemma received a loan from Good Dogg to purchase additional stock of coffee, sugar, spices, canned goods, etc., to sell.

Philippines

\$375 to go

[Lend Now](#)



Claudia received a loan from 2 team members to purchase new furniture, office equipment, uniforms, and materials.

\$1,600 to go

[Lend Now](#)

### Impact

Updated Daily

11,563

TEAM MEMBERS

\$7,338,600

AMOUNT LOANED

210,423

LOANS

18.2

LOANS PER MEMBER

[Rankings Across All Teams](#)

Last accessed 19<sup>th</sup> June 2013

## Appendix 4 – Kiva Community: Geographical Lending Teams

The screenshot displays the Kiva website interface for the 'Kiva Lending Team: Team Europe'. The header includes the Kiva logo and navigation links: Lend, About, Community, Updates, and My Portfolio. The main content area features the team's name, a sub-header 'A Local Area team since Aug 29, 2008', and a 'Recommend' button with a count of 60. Below this, there are tabs for About, Loans, Members, Goals, and Graphs. The 'About' tab is active, showing a European Union flag, the team's mission statement, and a 'Join Team' button. The mission statement reads: 'We loan because... We think Kiva is a unique opportunity for people all over the world to assist entrepreneurs in improving their businesses and communities.' The 'About us' section states: 'We are European lenders (EU, EFTA, and all those who feel they belong) who share the belief in Kiva's vision.' The location is listed as 'Europe'. Below the 'About' section, there are three main sections: 'Latest Messages' (99+ messages), 'Team Activity' (showing a loan to Davaanyam in Mongolia), and 'Impact' (updated daily). The 'Impact' section shows 4,321 team members, \$3,026,825 in amount loaned, and 100,227 loans. A 'Lend Now' button is visible at the bottom of the team activity section.

**KIVA** Lend About **Community** Updates My Portfolio

### Kiva Lending Team: Team Europe

A Local Area team since Aug 29, 2008

Recommend 60

About Loans Members Goals Graphs

**We loan because...**  
We think Kiva is a unique opportunity for people all over the world to assist entrepreneurs in improving their businesses and communities.

**About us**  
We are European lenders (EU, EFTA, and all those who feel they belong) who share the belief in Kiva's vision.

Location: Europe

**Join Team**

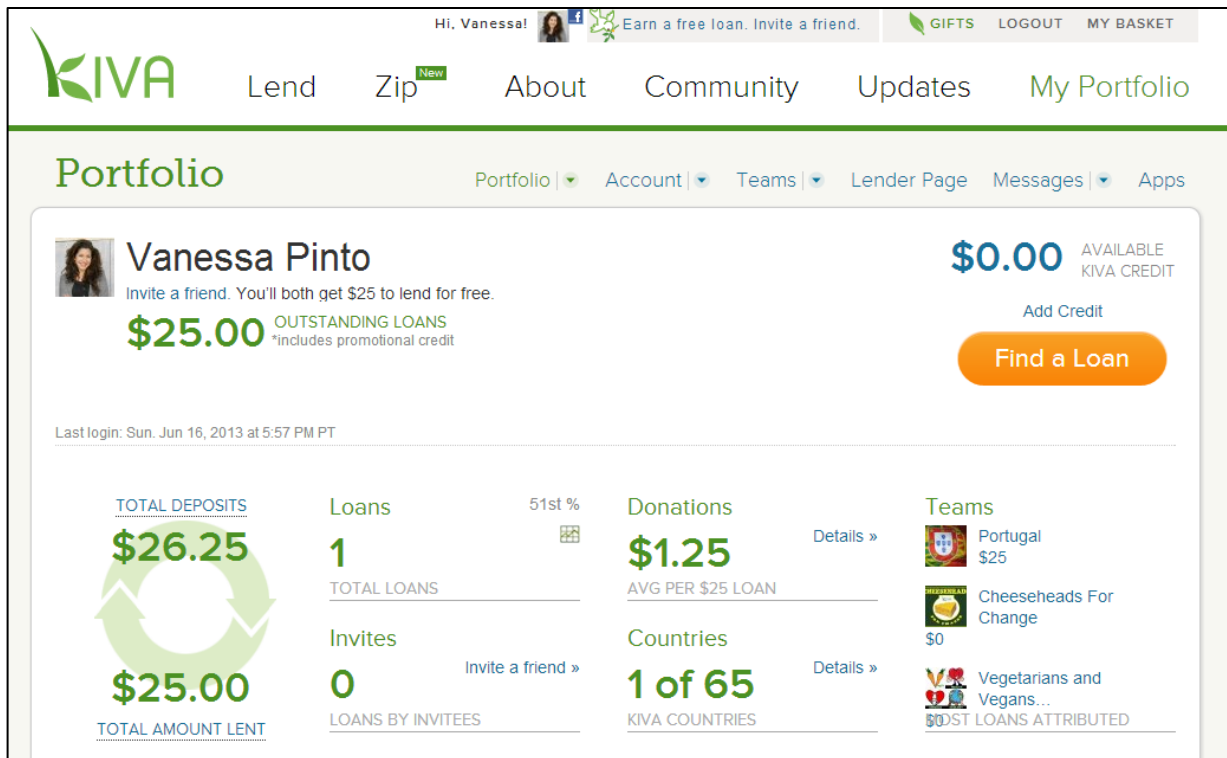
**Latest Messages**  
99+ messages. Join the team to get in on the action!

**Team Activity**  
All Activity  
Davaanyam received a loan from Dirk to purchase more goods and products to sell. Only 1 day left!  
\$325 to go  
Lend Now

**Impact** Updated Daily  
4,321 TEAM MEMBERS  
\$3,026,825 AMOUNT LOANED  
100,227 LOANS

Last accessed 19<sup>th</sup> June 2013

## Appendix 5 – Kiva: My Portfolio



## Appendix 6 – Kiva: My Invested Loan

**Gaudy Patricia**

Like 0
 Tweet 0
 Share 0

Lourdes de Platanares, Costa Rica
 Housing | Personal Housing Expenses

LOAN OVERVIEW
 REPAYMENT SCHEDULE
 LENDER COMMENTS






**PAYING BACK**  
**This loan has been fully funded!**  
 A loan of \$725 helped Gaudy Patricia with home improvements.  
**0%** repaid

Find a Loan

Repayment Term:	38 months (more info)
Repayment Schedule:	Irregularly
Pre-Disbursed:	Apr 13, 2013
Listed:	Apr 30, 2013
Currency Exchange Loss:	Possible
Default Protection:	Not Covered


Gaudy Patricia is 18-years old. She is single and lives with her siblings and parents, who are her first priority. With her loan, Gaudy Patricia

## Appendix 7 – Kiva Lend: Choose a Borrower

Choose a Borrower
 3,796 loans available


Sort by: Popularity

COUNTRY Clear
 

GENDER
 Male 1,624
 Female 2,181


SECTOR
 Agriculture 775
 Arts 11

page 1 of 190
 1 2 3 4 next last



**Walaa'**  
 Jordan | Education | Higher education costs  
 A loan of \$1,900 helps Walaa' to pay for her semester fees.  
 Read their story >

38% raised  
 \$1,900.00



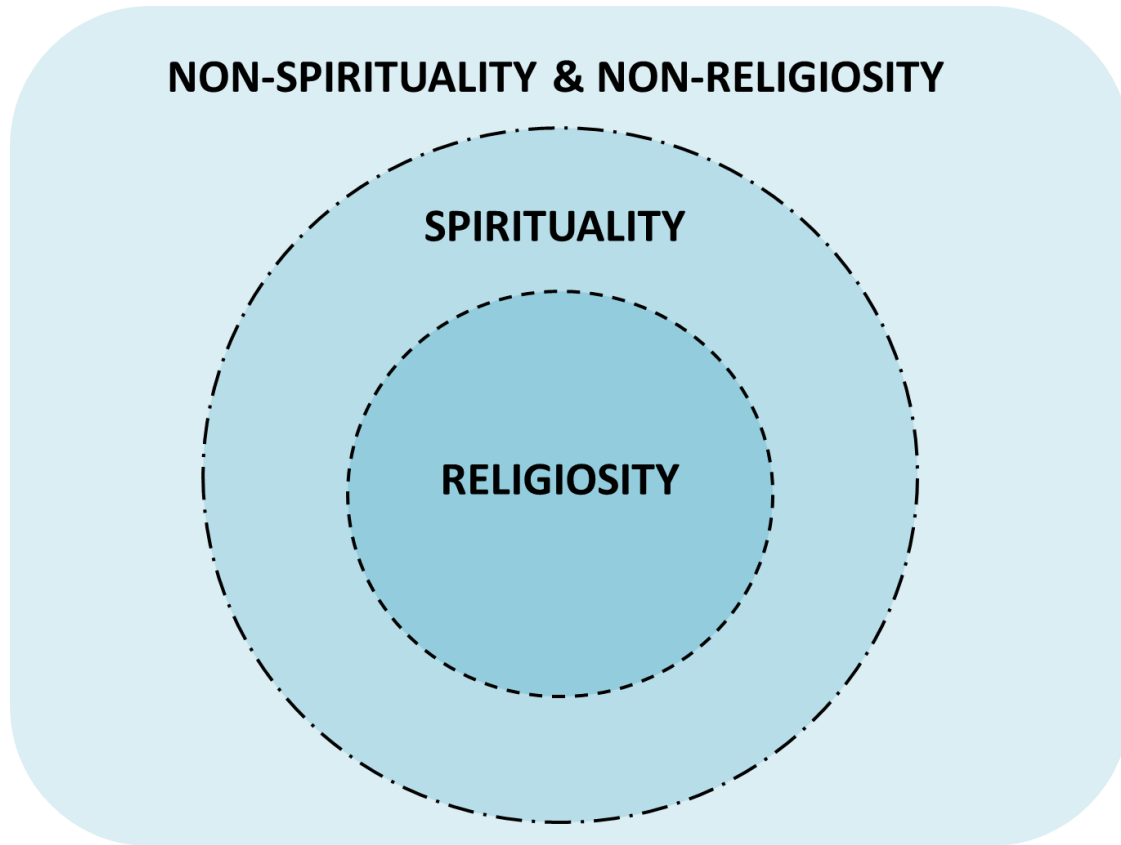
**Bakhat**  
 Pakistan | Food | Milk Sales  
 A loan of \$525 helps Bakhat to purchase another buffalo.  
 Read their story >

71% raised  
 \$525.00

M. Vanessa Pinto | Católica-Lisbon School of Business & Economics

45

**Appendix 7 – Illustration of Spirituality and Religiosity proposed in this study**



*“Contemporary world of Spirituality and Religiosity”, Vanessa Pinto, J. Andrei Villarroel and contribution from Isabel Cardoso and Alfredo Teixeira, July 2013*

## **Appendix 8 – Transcript of the interview with Dr. Isabel Cardoso**

Date: 3<sup>rd</sup> of July 2013

Dr. Isabel Alçada Cardoso teaches the subject of Christianity and Culture at Católica Lisbon University to the Business and Economics bachelors. She has a master and doctoral degree in Theology from Universidade Católica Portuguesa and is the president of the Cultural Center Pedro Hispano in Lisbon.

Further contact: *ialcadacardoso@mail.telepac.pt*

### **1. Views/opinion on the graphical representation proposed of Spirituality and Religiosity:**

Dr. Isabel began the interview by examining the graphical representation (appendix 8) and immediately recognizes both concepts: “What you mean by Spirituality is an intuition of the Transcendental, whereas Religiosity indicates a belonging to a certain religion that follows certain sacred laws, rituals and doctrine. (...) It all depends on the meaning you give to the word Religious. Having a religious intuition – which you suitably call Spirituality – is the feeling that there is something extraordinary out there. The Atheism denies completely this intuition or Spirituality, so it suits the Non-Spirituality. A religious individual is able to define this intuition/mystery by belonging to a certain religion, such as Christianity or Hinduism. If these concepts are well defined and understood this is a plausible representation of the reality.”

Dr. Isabel concluded that the illustration is a good representation of the reality, and suggested, as an example to describe “Spirituality”, Gnosticism.

### **2. Views/opinion on the survey questions that assess the religiosity of kiva’s individuals:**

The questions of the survey are available on the appendix 16. Dr. Isabel began by pointing out what she would change, in her understanding as a religious professor.

“In the first question I would change “Spiritual” for “Transcendental” because in a certain way you are already biasing the reader by naming such transcendental intuition “Spiritual”. In the last option of this first question, I would also change “ideologies, principles and beliefs” for “doctrines, sacred laws, and rituals” which are the three things that constitute a religion. Nevertheless these are just two details, the question looks well-constructed and trustworthy. As for the second question, I would stop it in

“religious services” because if you name “Church, synagogue” etc. there are many more to add. As for the remaining questions they look ok, and the overall survey has a good grasp of the topic, but you should seek input from a sociologist as well.

**3. Notes:**

“The thing about “Spiritual” people is that they are too attached to their personal freedom, thereby rejecting any relationship with a specific religion. They may go to a Catholic church or to a Muslim temple and pray, but they refuse any deeper involvement because religions have institutionalized beliefs and doctrines which they run away from, fearing it would diminish their freedom of thought. (...) Note that in my understanding Atheism, Agnosticism and Gnosticism are not considered religions, but heretic movements. Buddhism, for example, is a philosophy of life and not a religion, fitting the circle of Spirituality but not Religiosity because they do not have doctrines or sacred laws, which are a necessary condition for a religion.”

## **Appendix 9 – Transcript of the interview with Dr. Alfredo Teixeira**

Date: 4<sup>th</sup> of July 2013

Dr. Alfredo Teixeira is a professor at the Theology Faculty and an investigator of the Center of Religious and Cultural Studies at Universidade Católica Portuguesa (UCP). He has a doctoral degree in Political Anthropology from Instituto Superior de Ciências do Trabalho e da Empresa and a master degree in Theology from UCP.

Further contact: *alfredo.teixeira@ft.lisboa.ucp.pt*

**1. Views/opinion on the graphical representation of Spirituality and Religiosity proposed:**

Dr. Alfredo once faced with the graphical representations (appendix 8) indicated that the most problematic frontier was from “Spirituality” to “Non-Spirituality”. In his own words “I do not believe that the border between Spirituality and Non-Spirituality should be a closed line, it should have some permeability. In the horizon (borderline) of Spirituality we can have tendencies that connect with a transcendental energy, like the sun, and other tendencies that defend the Humanism - the essence of humanity. Both this examples are on the border between Spirituality and strong Atheism. The best example that materializes the permeability of that horizon is a new group called New



Age that gathers all this movements. (...) The border between Religiosity and Spirituality is easier to understand in today's society as nowadays the Religious is less prestigious than the Spiritual, which as became trendy. (...) In my opinion, at some point you should also include in your work Religiosity vs. Spirituality, because such dichotomy is used in the current market out there offering Spiritual journeys – but denying any approximation to the religious context. There is a minor distinction between Spirituality and Religiosity. (...) In my own understanding what is called today Spirituality is an area of liberation that categorizes all the religious people who do not want to be bound to certain institutionalized creeds. Spirituality is a certain decomposition of the Religiosity that embraces all the individuals who deny the institutionalized religious context. With this clear distinction I believe that the illustration suits its purpose. I believe that your model uses concepts that are used by the agents in the field, and by that they are easily recognized whereas other concepts, which are more scientifically accurate, would lack this recognition. In the end I believe the concepts chosen for this model are a wise choice”

**2. Views/opinion on the survey questions that assess the religiosity of kiva's individuals:**

The questions of the survey are available on the appendix 16.

“From the methodological point of view, I believe that the 5 categories you provide in the first question are in line with your graphical representation and can be understood from the individuals' perspective. You should be careful with the word “ideologies” that you use in the last option of the first answer, because that word is often used to describe the fighting movement towards religion, such as Atheism, and can be pejoratively perceived by your audience. In the end I believe this first question it works, as you clearly distinguish the “believing” from the “belonging”. This duality of religiosity is the nightmare for us, researchers. The fact that you limit the audience of the second question to those who see themselves as religious is good in the sense that you get a clearer of what you are trying to understand – their level of religiosity, but scientifically it would be interesting to see how many people attend religious services despite not considering themselves religious. Nevertheless this introduces a certain ambiguity from which your research would not benefit, so in the end it is better this way. The rest of the questions look pertinent to me.”

**3. Extra literature in the field:**

“I believe you can and should use the concept Spirituality, but not without a clear discussion of its ambiguity. The author Wade Clark Roof introduces an explanation to the Spirituality concept nowadays and will help you in your review.”

**4. Notes:**

“An important detail for you to consider in your thesis is that all the religious people are often mobilized to this aspect of pro-sociality, because there are several institutions that work alongside the religions to address these “inequalities in the world” like you call them. As a result they are likely to make financial donations in a different context than online platforms. As opposed to non-religious people who may find online platforms a way to donate. Furthermore, the typical user of a platform like this is an educated, wealthy individual, and these individuals, anthropologically, tend to be less religious than people who are not so wealthy and not so educated. In this way you may find an over-representation of these non-religious individuals in your survey, and you must be alert to the context you are investigating, and not make unwise conclusions such as non-religious people donate more than religious people.”

## Appendix 10 – Glossary of Variables & Survey questions

### Questions in the survey of a religious ambit:

**1. Select the option that best describes you:**

- A. I do not believe in a Spiritual or Higher Entity and I do not feel attached to any religion in particular. (*non-spiritual*)
- B. I believe in a Spiritual or Higher Entity but I do not feel attached to any religion in particular. (*spiritual*)
- C. I believe in a Spiritual or Higher Entity and I feel attached to a religion although I am not active in the Community. (*religious*)
- D. I have firm belief in a Spiritual or Higher Entity, and I feel attached to a religion as I am active in the Community. (*religious +*)
- E. I have firm belief in a Spiritual or Higher Entity, I feel attached to a religion as I am active in the Community and I live accordingly to its ideologies, principles and beliefs. (*religious ++*)

**Correspondent Variables:**

Aggregated Variable (B,C,D,E): **\*BELIEVE**

Aggregated Variable (C,D,E): **\*RELIGIOSITY**

Variable (B): **\*PURESPIRITUAL**

**2. Besides special occasions such as Weddings and Funerals, how often, if at all, do you attend religious services at your Church, Synagogue, Temple or Spiritual Community?**

- A. More than once a week
- B. Once a week
- C. At least once a month
- D. Only on special holy days
- E. Less often
- F. Never

**Correspondent Variable: \*ATTEND**

**3. Answer Yes or No to the following questions:**

- A. Do you often find yourself thinking about the inequalities and suffering in the World?
- B. Do you feel a sense of responsibility for reducing those inequalities and suffering in the World?
- C. Did you ever make financial contributions as a mean to address the inequalities in the World?

**Correspondent Aggregated Variable: \*PRINCIPLES**

## Appendix 11 – Regression Results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
AGE	<b>0,033***</b> (0,003)	<b>0,033***</b> (0,003)	<b>0,033***</b> (0,003)	<b>0,034***</b> (0,003)	<b>0,034***</b> (0,003)	<b>0,034***</b> (0,003)	<b>0,035***</b> (0,003)
FEMALE	<b>-0,697***</b> (0,098)	<b>-0,711***</b> (0,099)	<b>-0,685***</b> (0,095)	<b>-0,694***</b> (0,100)	<b>-0,693***</b> (0,100)	<b>-0,700***</b> (0,091)	<b>-0,685***</b> (0,085)
EDUCATION	0,007 (0,041)	0,006 (0,041)	0,005 (0,039)	0,001 (0,041)	0,001 (0,041)	0,001 (0,038)	0,013 (0,034)
TENURE	<b>0,413***</b> (0,030)	<b>0,412***</b> (0,029)	<b>0,417***</b> (0,028)	<b>0,418***</b> (0,029)	<b>0,418***</b> (0,029)	<b>0,414***</b> (0,026)	<b>0,416***</b> (0,025)
PRINCIPLES		-0,081 (0,056)	-0,073 (0,054)	-0,082 (0,057)	-0,081 (0,057)	-0,074 (0,056)	-0,081 (0,054)
PURESPIRITUAL			<b>-0,328***</b> (0,092)				
BELIEVE				<b>-0,281***</b> (0,099)	<b>-0,299***</b> (0,105)	<b>-0,380***</b> (0,133)	<b>-0,477***</b> (0,131)
RELIGIOSITY					0,010 (0,031)	-0,021 (0,039)	-0,098** (0,042)
ATTEND							<b>0,144***</b> (0,038)
_cons	1,634*** (0,240)	1,920*** (0,314)	1,927*** (0,302)	2,063*** (0,324)	2,060*** (0,323)	2,126*** (0,317)	2,086*** (0,298)
/lnalpha	0,638*** (0,031)	0,636*** (0,031)	0,629*** (0,029)	0,630*** (0,031)	0,630*** (0,031)	0,612*** (0,031)	0,598*** (0,028)
Number of observations	3.928	3.927	3.925	3.925	3.925	3.618	3.618

R2

F

note: \*\*\* p&lt;0.01, \*\* p&lt;0.05, \*p&lt;0.1

note 2: Results reported as coefficient and (standard deviation).

### *Dependent Variable: Number of loans*

*The performance metric used is the number of loans that the lender has invested in at Kiva. This is the total amount of loans that each individual lender has done from the start.*

**Appendix 12 – Correlation Analysis**

	age	female	education	kivatime	principles	believe	religiosity	
perf2	10.000							
age	0.1217	1.0000						
female	-0.0698	0.0263	1.0000					
education	0.0187	0.0642	0.0245	1.0000				
tenure	0.1428	0.1852	0.0115	0.0933	1.0000			
principles	-0.0128	0.0038	-0.1202	-0.0644	-0.0232	1.0000		
believe	-0.0171	0.0883	0.1221	-0.0033	0.0142	-0.0400	1.0000	
religiosity	-0.0048	0.0777	0.0385	0.0539	0.0131	-0.0912	0.5354	1.0000
attend	0.0215	0.0309	0.0632	0.0243	0.0261	0.0084	0.4943	0.6518

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